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<u>Search Classification Data</u> | <u>Class Numbers & Titles</u> | <u>Class Numbers</u> | <u>USPC Index</u> | <u>International</u> | <u>HELP</u> | <u>Employee by Name</u> | <u>Employees by Org</u>

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<u>39</u> <u>40</u>

. Ball spotting rack

1 1

## Class 473 GAMES USING TANGIBLE PROJECTILE

	view a PDF version of this file
	BILLIARDS OR POOL
<u>1</u> 2	. Practice device or device to aid in aiming cue or cue ball during shots (e.g., to assist
<u>~</u>	in bank shots, etc.)
3	. Adapted to be played on floor, ground, or court
3 4 5 6 7	. Table or gameboard
<del></del>	With mechanical ball projector
<u>5</u>	Convertible between billiard and pool (i.e., between pocketed and nonpocketed)
<u> </u>	Using pocket blocking device positionable only in vicinity of pocket (e.g., pocket
<del>_</del>	plug, rail piece, etc.)
8	Using interchangeable, shiftable, reversible, or removable cushion rails
9	Invertible playing surface
10	Convertible to another type of furniture or to different type of game playing surface
11	Rail vertically raised or lowered relative to bed
12	Vertically movable playing surface
13	Detachable or hinged rail
14	Convertible to different type of game playing surface
8 9 10 11 12 13 14 15	Readily foldable or collapsible
16	Rotatable playing surface
<u>17</u>	Having pocket or other target with ball actuated indicator
<u>18</u>	Playing surface having unconventional peripheral configuration defined by the
	carom rails
<u>19</u>	Attachment or accessory providing plural pockets or other targets located at only
	one end of playing surface
<u>20</u>	Playing surface having unconventional number, entrance opening, or arrangement
	of pockets or having additional or shiftable carom or bumper means thereon
<u>21</u>	Table attached ball rack
21 22 23 24 25 26 27	With conveying chutes interconnecting pockets with ball rack
<u>23</u>	With means to distinguish or identify each ball pocketed
<u>24</u>	Coin controlled
<u>25.</u>	With means to separate or segregate store balls pocketed by each player or team
<u>26</u>	Ball rack also constitutes or includes spotting rack
<u>27</u>	With means to prevent unauthorized use of table or to limit playing time or number
20	of games played
<u>28</u>	<ul><li> Pocket structure</li><li> Playing surface structure (i.e., bed structure)</li></ul>
<u>29</u>	
<u>30</u>	Device for securing playing surface covering (e.g., for securing billiard table cloth,
21	etc.) Rail structure
32	Cushioned portion thereof
32 32	Frame or leg structure
34	Dust cover therefor
3 <del>5</del>	. Cue chalker
31 32 33 34 35 36 37 38 39	Chalk holder
37	With means for automatically applying chalk
38	Flexibly tethered
<u>39</u>	Secured to generally fixed support
40	Pall coeffing rock

.. With ball carrying or storage means <u>41</u> . Cue rest <u>42</u> 43 .. Hand attached or engaged by hand in vicinity of cue supporting portion . Cue <u>44</u> 45 .. Mechanically operated .. Disparate attachment therefor or convertible to or combined with disparate device 46 .. With user adjustable or changeable weight 47 <u>48</u> .. Axially telescopic <u>49</u> .. Tip or tip fastener therefor <u>50</u> ... Clamp or press 51 ... Striking portion formed of material other than leather <u>52</u> <u>53</u> .. Having characteristic enabling ball to be mechanically separated from other balls <u>54</u> **BOWLING** <u>55</u> . Practice or assist device <u>56</u> .. For handicapped person <u>57</u> .. Selective pin setter .. Ball path indicator <u>58</u> 59 .. Bowler worn or carried ... Including means for positive engagement with ball <u>60</u> ... Finger support or guide 61 ... Wrist support or guide 62 63 ... Arm or elbow support or quide . Handling of pin or pin representation 64 <u>65</u> .. Including electrical cycle sequence control .. Including means for conserving energy <u>66</u> <u>67</u> .. With indicator 68 ... Tethered or pivotal pin <u>69</u> ... Pinfall .... Score <u>71</u> ..... Including electromechanical calculating means <u>72</u> ... Foul .. Pin setter 74 ... Rollable, translatable, or simulative target ... Pivotal pin <u> 76</u> .... Pivot substantially at base of pin 77 .... With spring detent <u> 78</u> ... Tethered pin 79 .... Tethered at base of pin 80 ..... Including reset lever or crank <u>81</u> .... Including means to remove dead wood ..... Pin biased away from bed <u>82</u> <u>83</u> ... Manually loadable .... Including means to upright pin 84 ... Magnetic force acts on pin <u>85</u> 86 ... For alternative pin sets ... Including means to lift live wood <u>87</u> 88 .... With compensation for pin offset 89 ... Including distributor 90 .... Including means to convey pin to distributor <u>91</u> ..... Including elevator .. With compensation for pin offset <u>92</u> <u>93</u> .. Pit cushion or actuator therefor <u>94</u> .. Pin guide or conveyor ... Distributor <u>95</u> 96 .... Pivotable chute or conveyor ... Elevator 97 <u>98</u> .... With ball separator

99 ... And ball handling 100 ... Sweep .. Pin sensor 101 102 .. Pin spot 103 ... Including means for positive pin alignment .... Retractable peg 104 .... Socket-type 105 . Ball handling or diverting means 106 .. Mechanical projector 107 .. Tethered ball 108 .. Means to change or curve ball path 109 110 .. Ball return 111 ... Ball lift or elevator 112 ... Mechanical means for ball retarding or arresting 113 .. Gutter structure <u>114</u> .. Backstop, division board, or adjunct therefor 115 . Alley or board structure .. Portable game board, table, or alley 116 <u>117</u> .. With nonwooden alley surface or lining <u>118</u> . Pin 119 .. Composite structure (e.g., distinct layers, components, joint, etc.) ... With reinforcing filament, fiber, or fabric 120 121 ... With metal shell or skin ... With wooden component <u>122</u> 123 .... Laminated or attached wooden components <u> 124</u> .... With end or bottom reinforcing preform 125 . Ball 126 .. With weight block 127 .. With specific grip means 128. ... Thumb or finger hole grip 129 .... Size or depth adjusting means <u>130</u> .... Removable insert or bushing 131 **GOLF** 132 . Ball feeding means and tee <u>133</u> .. Adjustable tee height ... Condition responsive feeding means (e.g. automatic) 134 ... Pneumatic <u>135</u> ... Electrical 136 **137**. .. Pivotal arm ball feed 138 . Projectile tethered to swingable implement 139 . Anchored (e.g., tethered, etc.) projectile 140 .. With electrical sensor or electrical indicator <u>141</u> ... Pictorial flight path image display 142 .. Spool for tether 143 .. With force or direction indicator and tether 144 ... Linear spring indicator 145 .. Force or direction indicator associated with projectile moving around a horizontal 146 .. Force or direction indicator associated with projectile moving around a vertical axis .. Spherical projectile attached to tether 147 148 .. Plural projectiles 149 .. Projectile moves around vertical axis <u>150</u> . Projectile addressing surface and target, or distance marker (e.g., course, putting green with cup, driving range, miniature golf course, etc.) 151 .. Electrical sensor or electrical indicator responsive to swingable implement or projectile 152 ... Sensor is projectile responsive (e.g., free-flight detection means, etc.) .... Projectile in receiver indicator <u> 153</u>

```
154
            .... Target impact responsive
            .... Including sensor responsive to projectile on addressing surface or in flight (e.g.,
155
            tee-target time detection, etc.)
156
            ..... Pictorial flight path image display
157
            .. Non-earth fairway
158
            ... And obstacle (e.g., miniature golf course windmill, etc.)
            ... Target is surface positioned aperture
159
            .... Selectively contourable (e.g., slope simulating surface, etc.)
160
161
            ..... Motor actuation
            .... Collapsible (e.g., for storage, etc.)
162
163
            .... Projectile return
            ... Projectile rebounds off target
164
165
            .. Particular projectile (e.g., reduced flight ball, etc.)
166
            .. Projectile return
167
            .. Fairways extending radially from centrally located addressing surface or target
168
            .. Plural addressing surfaces (e.g., driving range, etc.)
            ... Having sequential play (e.g., regulation earth course, etc.)
169
170
            .... Upstanding target (e.g., wicket, bucket, etc.)
            ... Putting green
<u>171</u>
172
            .. Upstanding target
<u> 173</u>
            . Target or obstacle (e.g., putting hole, hole marker, sand trap, etc.)
174
            .. Target on putting surface
175
            ... Receiver is cup in earth (e.g., regulation hole in green, etc.)
176
            .... Having cup marker (e.g., flag pin, etc.) or with sensor responsive to projectile
<u> 177</u>
            ..... And projectile removal
<u>178</u>
            ..... Electrical actuation (e.g., solenoid, etc.)
179
            .... Cup diameter restriction means (e.g., filler plug, etc.)
180
            ... Receiver or projectile responsive indicator
181
            .... Selectively adjustable approach surface
182
            .... Projectile return
            ..... Electrical actuation
183
184
            ..... Gravity
185
            .... Plural receivers
186
            .... Displaceable by projectile impact
187
            ..... Resilient or pivotal portion arranged in a circle to retain projectile
188
            ..... Top of projectile engaged
            ..... Pivotal element
<u> 189</u>
190
            ... Projectile responsive sensor (e.g., target impact indicator, etc.)
191
            ... And projectile return
            ... Electrical sensor
192
193
            ... Projectile adheres to target
194
            .. Having projectile return
195
            .. Projectile receiving aperture (e.g., goal opening, etc.)
196
            ... Aperture forming surface forms plane parallel to support surface
197
            .. Net
198
            . Moving projectile responsive sensor or indicator
199
            .. Electrical
<u> 200</u>
            .. Indicator integral with projectile
201
            . Hand on grip positioning aid or grip indicator
202
            .. With electrical sensor or electrical indicator
203
            .. Integral handle having finger conforming configurations
<u> 204</u>
            .. Angularly related integral grip portions
205
            .. Worn on hand (e.g., glove, etc.)
206
            .. Removably attachable to swingable implement
207
            . Practice device attachable to body
208
            .. Attachable to head, neck, or mouth
            ... Electrical
209
            ... Sighting element (e.g., eyeglasses, etc.)
<u> 210</u>
```

<u>211                                   </u>	With displaceable indicator responsive to head movement
212	Attachable to arm, hand, or wrist
213	Wrist
214	Spans elbow
<u>215</u>	Attachable to hips, torso, or waist
<u>216</u>	Waist encircling belt anchored to static structure
<u>217                                    </u>	Attachable to foot
<u>218                                    </u>	. Foot positioning aid and indicator associated with swingable implement
<u>219</u>	. Practice swingable implement or indicator associated with swingable implement
220	With lighting (e.g., laser, etc.) means attachable to or integral with implement
221	With electrical sensor or electrical indicator
222	Sensor positioned apart from implement to interact with a separate cooperating
<u> </u>	sensor means attachable to or integral with implement
222	
<u>223                                   </u>	Integral with or attachable to swingable implement
<u>224                                   </u>	Audible indicator
<u>225                                   </u>	Sensor integral with projectile addressing surface
<u>226                                   </u>	Device attachable to or integral with swingable implement
227	Nonhandle element engagable with body
228	Air resistance device (e.g., airfoil, etc.)
229	Anchored (e.g., tethered, etc.) swingable implement
230	Wheel
	Adjustable swingable implement, or swing or position indicator
<u>231</u>	
<u>232</u>	Alterable shaft provides swing force indication
<u>233                                   </u>	Swing speed indicator
<u>234</u>	Audible
<u>235</u>	Projectile retained by head of swingable implement during swing
<u>236</u>	Projection on face of swingable implement head provides reduced striking area
237	Indication is a mark made by implement swing
238	Adjustable implement or static position indicator (e.g., with respect to the golfer,
	projectile, target, etc.)
239	Adjustable shaft length
<u>240</u>	Reflective element
<u>241                                    </u>	Bubble leveler
<u>242</u>	Integral with or attachable to swingable implement head
<u>243                                    </u>	Self-standing implement
244	Selectively adjustable positioning means
<u> 245</u>	Adjustable loft angle
246	And adjustable lie angle
247	Longitudinal bore in head receives elongated member about which head pivots
<del>248</del>	Adjustable lie
	Surface on head simulates ball
<u>249</u>	
<u>250</u>	Having transparent or translucent element
<u>251</u>	Used for putting
<u>252</u>	Horizontally spaced linear indicia perpendicular to projectile striking face
<u>253                                    </u>	And vertically spaced apart indicia
<u>254                                    </u>	Vertically spaced apart indicia
<u>255</u>	T-shaped head
256	Particularly weighted practice implement
257	
	Swingable implement swing path indicator
	Swingable implement swing path indicator Head or shaft continuously engaged during swing
<u>258</u>	Head or shaft continuously engaged during swing
<u>258</u> 259	Head or shaft continuously engaged during swing Closed loop
258 259 260	Head or shaft continuously engaged during swing Closed loop Swingable implement head engaged
258 259 260 261	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> </ul>
258 259 260 261 262	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> <li> Barrier is projectile addressing surface</li> </ul>
258 259 260 261 262 263	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> <li> Barrier is projectile addressing surface</li> <li> Self-righting</li> </ul>
258 259 260 261 262 263 264	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> <li> Barrier is projectile addressing surface</li> <li> Self-righting</li> <li> Plural barriers, vertically spaced apart</li> </ul>
258 259 260 261 262 263	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> <li> Barrier is projectile addressing surface</li> <li> Self-righting</li> <li> Plural barriers, vertically spaced apart</li> <li> Plural barriers, horizontally spaced apart</li> </ul>
258 259 260 261 262 263 264	<ul> <li> Head or shaft continuously engaged during swing</li> <li> Closed loop</li> <li> Swingable implement head engaged</li> <li> Barrier which monitors swingable implement head movement</li> <li> Barrier is projectile addressing surface</li> <li> Self-righting</li> <li> Plural barriers, vertically spaced apart</li> </ul>

<u>267</u> <u>268</u>	Reflective device Sighting device directing golfer`s visual focus toward a point to restrain head movement
269	Responsive to weight shift
270	Foot positioning aid
<del>271</del>	Having separate body engagable member
<u>271</u> 272	Selectively adjustable with pivotal members
	Selectively adjustable with linearly slidable member (e.g., telescopically
<u>273                                    </u>	
274	extendible)
<u>274                                    </u>	Engaged with head or neck
<u>275</u>	And separate body engagable member
<u> 276</u>	Engaged with arm or shoulder
<u>277                                   </u>	Engaged with hips, torso, or waist
<u>278                                    </u>	. Practice projectile addressing surface (e.g., driving mat, etc.)
<u>279                                    </u>	Selectively adjustable (e.g., tiltable etc.)
280	. Practice projectile
281	Having air resistance device
282	. Club or club support
<u>283</u>	And scorekeeping device
<u>284</u>	And tee
	And tee And ball position marker
<u>285</u>	
<u>286</u>	And turf repair tool or ball retriever
<u>287</u>	Club set
<u>288</u>	Interchangeable handle, striking face, or shaft
<u>289                                    </u>	Particular correlated shaft flexural characteristic
<u>290                                    </u>	Particular correlated head characteristic
<u>291</u>	Mass distribution
<u> 292 </u>	Head, shaft, and handle having particular combined center of gravity
<u> 293                                    </u>	Player faces targét (e.g., croquet style putter, etc.)
<u> 294 </u>	Hands spaced apart on handle
295	Rotatable handle
296	Longitudinally adjustable handle or shaft
297	Particularly weighted handle
298	Grip or handle having particular nonwinding attachment to shaft (e.g., quick
===	detachable, etc.)
299	Reattachable
300	
	Grip
<u>301</u>	Spiral winding
<u>302</u>	Having recess or projection
<u>303</u>	Having longitudinal recess or projection
<u>304</u>	One piece head and shaft
<u>305</u>	Head and shaft connection
<u>306</u>	Threaded shaft
<u>307                                    </u>	Detachable and reattachable
<u>308</u>	Sleeve or winding engaged over outside of joint, hosel, and shaft
<u> 309</u>	Joint formed with sleeve engaging shaft and hosel
<u>310</u>	Resilient sleeve engaging hosel and outer shaft wall
311	Shaft contacts sole
312	Having core (e.g., weight, etc.) positioned in head engaging shaft end
313	Putter
314	Particular relationship between shaft longitudinal axis and head orientation
315	Noncircular shaft end wall engages hosel
316	Shaft
317	Reduced air resistance
318	Including nonmetallic material or vibratory wave modifying feature
319	Filament (e.g., fiber, etc.) or sheet wrapped about shaft longitudinal axis
	Including metal
320 321	And metal
<u>321</u>	And metal

<u>322</u>	Sections connected along longitudinally extending seam		
<u>323                                   </u>	Shaft tapered in steps		
324	Head		
325	Plural striking faces		
<u>326</u>	Liquid interior		
	·		
<u>327</u>	Reduced air resistance		
<u>328</u>	Reduced ground resistance		
<u>329                                    </u>	Striking face surface deforms upon impact (e.g., resilient, etc.)		
<u>330</u>	Curved, grooved, or roughened striking face		
331	Plural grooves		
332	Vibratory wave (e.g, shock wave, etc.) modifying feature		
<u>333</u>	With element displaceable with respect to another head element during swing		
	· · · · · · · · · · · · · · · · · · ·		
<u>334</u>	Selectively adjustable weighting element		
<u>335</u>	Embedded in head		
<u>336</u>	Elongated horizontal bore		
<u>337</u>	Perpendicular to projectile striking face		
<u>338</u>	In vertical bore access by sole		
339	In vertical bore access through top		
340	Putter		
	Toe and heel weighting		
<u>341</u>			
342	Striking face insert		
<u>343                                   </u>	Wood composition		
<u>344                                   </u>	Having particular sole plate		
<u>345</u>	Hollow body		
<u>346</u>	With internal support rib or injected material		
347	Embedded fiber composition		
348	Including metal		
<del>349</del>	Particular material composition or mass distribution		
	•		
<u>350.</u>	Recess or cavity behind striking face		
<u>351</u>	. Ball		
<u>352</u>	Buoyant		
<u>353                                   </u>	Having locator means		
<u>354</u>	Liquid interior		
<u>355</u>	Hollow pockets between spherical core and cover		
356	Wound interior		
<u>357</u>	Surrounding non-wound spherical core		
<u>358</u>	Hollow core		
<u>359</u>	Metal core or winding		
<u>360</u>	Wound wire		
<u>361                                    </u>	Plural diverse layers between core and cover		
362	Diverse tension in wound layers		
363	Nonwound layer		
364	Plural diverse nonwound layers		
<u>365</u>	Having particular cover		
	Wound wide band		
<u>366</u>			
<u>367</u>	Interior includes injected or compressed material		
<u>368</u>	Injected material		
<u>369                                    </u>	Injected gas		
<u>370</u>	Diverse layer between shperical core and cover		
371	Particular unitary or layered construction		
372	Containing metal		
<del>373</del>	Diverse layer between spherical core and cover		
<del>373</del> 374	Diverse layer between spherical core and cover		
	Hollow core		
<u>375</u>			
<u>376</u>	Plural diverse layers		
<u>377</u>	Diverse cover and interior		
<u>378</u>	Particular cover (e.g., size, material, dimple pattern, etc.)		
<u>379                                    </u>	Icosahedral dimple pattern		

<u>380</u>	Cuboctahedral dimple pattern
<u>381</u>	Dodecahedral dimple pattern
<u>382</u>	Octahedral dimple pattern
<u>383</u>	Particular dimple detail
384	Depth or width
385	Containing metal
<u>386</u>	. Tee setting device
	. Tee
<u>387</u>	
<u>388</u>	Folded flat stock material
<u>389</u>	Separable from pack containing plural tees
<u> 390</u>	Plural
<u>391                                    </u>	Separable or separately movable
392	Projectile supporting surface horizontally offset from vertical insertable shank
393	Tether
394	Restrained by auxiliary weight
395	Wire
<u>396</u>	Relatively movable sections
<u>390</u> 397	Pivotal about distinct horizontal axis
<u>398</u>	Elevation guide
<u>399</u>	Particular biodegradable or frangible material
<u>400</u>	Elevation guide for insertable shank
<u>401</u>	Plural diverse materials
<u>402</u>	Shank extends below level of projectile addressing surface
403	At acute angle with surface
404	. Green slope indicator
405	. Accesory device located on projectile addressing surface (e.g., tee block, direction
	indicator, etc.)
<u>406.</u>	. Ball position marker
<u>407</u>	. Club selection, ball direction, or distance indicating aid
<u>408</u>	. Player manipulated turf repair tool
<u>409</u>	. Method
<u>410</u>	CROQUET; GAME ELEMENT OR ACCESSORY THEREFOR
<u>411                                   </u>	. Arch type of goal or target, per se (i.e., croquet wicket)
<u>412</u>	. Player-carried, nonmechanical projector, per se (e.g., a mallet, etc.)
<u>413                                    </u>	. Ball, per se
<u>414</u>	HOPSCOTCH
415	PLAYING FIELD OR COURT GAME; GAME ELEMENT OR ACCESSORY THEREFOR
<del></del>	OTHER THAN PROJECTOR OR PROJECTILE, PER SE
416	. Having game element combined with or convertible to game element or practice or
<u></u>	training device for different type of projectile game
417	
417	. Means removably supporting projectile in position to be struck and thereby
410	projected by player (e.g., batting tee, etc.)
418	Projectile suspended or is supported by column of fluid
<u>419</u>	Having means engaging top of projectile (e.g., kicking trainer or tee, etc.)
<u>420</u>	For projectile intended to be projected by kicking (e.g., kicking trainer or tee, etc.)
<u>421</u>	. Batting backstop or cage
<u>422</u>	. Practice or training device
<u>423</u>	Tethered projectile
<u>424</u>	Tether attached to means adapted to be held by, carried by, or attached to person
425	Person held, carried, or attached means is nonmechanical projector
426	Projectile tethered between opposed tether sections
427	Projectile continuously driven in closed orbit prior to being struck
428	Projectile slidable along a line
429 429	
	Tether pivotally attached for orbital revolution
<u>430</u>	Projectile suspended by tether
431	Having projectile return means
<u>432</u>	Return chute
<u>433                                   </u>	With or for basketball-type goal

434	Deflector
435	Planar
436	Using moving arm or rotating wheel
<u>437</u>	Weight externally mounted by user to manually held and swung projector for
<del>437</del>	warmup or exercise
430	
<u>438</u>	For football or rugby
<u>439                                    </u>	Projectile target or stop
<u>440                                   </u>	Running grid or resistance course
<u>441</u>	Blocking, tackling, or charging device
442	Suspended or suspendible dummy
443	Suspension movable in horizontal plane
444	Self-erecting or person-supported dummy
445	Dummy mounted on support enabling traverse over ground or floor during
<del>113</del>	training (e.g., charging sled, etc.)
4.4.6	
<u>446</u>	For game using apertured or pocketed goal or target (e.g., for hockey, soccer, polo,
	lacrosse, etc.)
<u>447                                   </u>	For game using elevated, horizontally disposed goal or target (e.g., for basketball,
	etc.)
<u>448</u>	Hoop-opening reducer or means for improving arch of ball shot toward goal or
<del></del>	target
449	Rebound or tipping trainer
<u>450</u>	Player worn or carried
<u>451</u>	For game in which play involves base running (e.g., for baseball, cricket, etc.)
<u>452</u>	Foot positioner (e.g., stance, stride device, etc.)
<u>453                                    </u>	Bat swing analyzer or guide
<u>454                                   </u>	P <u>itcher`s targ</u> et
<u>455                                   </u>	With electrically operated or actuated indicator
<u>456</u>	Having subdivided strike zone
<u>457</u>	Practice bat
458	Player worn or carried
459	For game using field or court having dividing means thereon for separating
<u></u>	opponents (e.g., for tennis, volleyball, table tennis, etc.)
460	
<u>460</u>	Projectile collector for field or court (e.g., trough, ball sweeper, etc.)
<u>461</u>	Racket or paddle swing analyzer or guide
<u>462</u>	Projectile target
<u>463                                    </u>	Practice racket or paddle
<u>464</u>	Player worn or carried
<u>465</u>	. Having at least two different types of game elements used in same game
466	For game in which court or field is body of water (e.g., water polo, water volleyball,
	etc.)
467	Having boundary detector (e.g., ball-out-of-bounds detector for tennis court, etc.)
468	For game in which play involves base running (e.g., baseball, cricket, etc)
<u>469</u>	Having field or court dividing barrier with apertured goal or target therein or
<del>403</del> _	thereon
470	
<u>470</u>	For game using goal or target for projectile (e.g., football, rugby, etc.)
<u>471                                    </u>	For game in which goal or target is peripherally located aperture or pocket (e.g.,
	hockey, soccer, lacrosse, polo, etc.)
<u>472</u>	For game in which peripheral goal or target is elevated and horizontally disposed
	(e.g., basketball, etc.)
<u>473</u>	For game using field or court having dividing means thereon for separating
·	opponents (e.g., a net used for volleyball, etc.)
<u>474</u>	For game also using projectors carried by players (e.g., tennis, badminton, etc.)
475	Table tennis
475 476	. Goal or target structure for projectile; element thereof
<u>477</u>	For football or rugby (e.g., goal post, etc.)
<u>478</u>	Apertured or pocketed goal or target (e.g., for hockey, soccer, polo, lacrosse, etc.)
<u>479</u>	Goal or target is elevated and horizontally disposed (e.g., for basketball, etc.)
<u>480                                    </u>	With goal indicator

481	Backboard or support structure therefor
<u>482</u>	Suspended
<u>483</u>	With height adjustment feature
<u>484</u>	Having parallelogram linkage
<u>485</u>	Hoop or the net, pocket, or support structure therefor
<u>486</u>	Breakaway hoop
<u>487</u>	Having means for mounting over edge of support
<u>488</u>	Quick mount hoop
<u>489</u>	Removable net-mounting subassembly
<u>490</u>	. Means for dividing field or court into compartments; element thereof or accessory
	therefor (e.g., a net, marking strip, marked line, etc.)
<u>491</u>	Net attachable to game table
<u>492</u>	Net post
<u>493</u>	With net-tightening means
<u>494</u>	Net, with net, or for net
<u>495</u>	Net center stay
<u>496</u>	. Table-tennis table
<u>497                                    </u>	. Pitching rubber or mound
<u>498</u>	. Cricket wicket
<u>499</u>	. Base for game in which play involves base running (e.g., for baseball, etc.)
<u>500</u>	With indicator
<u>501</u>	Breakaway
<u>502</u>	. Flag belt (e.g., for use in football game without tackling, etc.)
<u>503</u>	. Projectile catcher other than combined projector-catcher device
<u>504                                    </u>	. Cover for playing field or court (e.g., for baseball field, etc.)
<u>505</u>	PLAYER-HELD DEVICE FOR BOTH PROJECTING AND CATCHING AERIAL
	PROJECTILE; PART THEREOF OR ACCESSORY THEREFOR (I.E., COMBINED
	PROJECTOR-CATCHER DEVICE)
<u>506</u>	. With tethered projectile
<u>507                                    </u>	Having pocketed catcher
<u>508</u>	Having elastic tether
<u>509</u>	. Having projectile conducting means between separate entrance and exit (e.g.,
	continuous orbit, etc.)
<u>510</u>	. Both projector and catcher are pocketed
<u>511                                   </u>	With mechanical projection
<u>512</u>	Pocket-to-pocket type
<u>513                                    </u>	Having pocket with laterally facing opening (e.g., lacrosse stick, jai alai cesta, etc.)
<u>514</u>	. Having impaling, hooking, or ensnaring type catcher
<u>515</u>	. Having pocketed catcher connected to but spaced apart from projector
<u>516</u>	PLAYER HELD AND POWERED, NONMECHANICAL PROJECTOR, PER SE, FOR
	PROJECTING AERIAL PROJECTILE BY STRIKING; PART THEREOF OR
	ACCESSORY THEREFOR
<u>517                                    </u>	. Having projectile retrieving means
<u>518                                    </u>	. Body attachable
<u>519                                    </u>	. With user shiftable, adjustable, or interchangeable weight for use during play or
	with freely shiftable mass for increasing impact force
<u>520</u>	. With sound-deadening, vibration-damping, or shock-absorbing feature other than
	projectile- or hand-contact surface or with rebound reducing feature
<u>521</u>	For racket or paddle
<u>522</u>	Contacts string
<u>523</u>	In, under, or contacting grip
<u>524</u>	. Racket or paddle; accessory therefor (e.g., a tennis racket, tennis racket press, etc.)
<u>525</u>	Having striking faces attached to the ends of intermediate handle
<u>526</u>	Having handle at an angle to, offset from, or nonradially oriented relative to plane
	of striking member
<u>527</u>	Paddle
<u>528</u>	Projectile striking surface is flexible sheet secured to peripheral frame
<u>529                                    </u>	Having resilient blade facing

<u>530</u>	Blade having means to enhance friction upon impacted projectile (e.g., to enhance English upon projectile, etc.)
<u>531</u>	Folding or detachable shaft
<u>532</u>	Having replaceable string frame
	Double strung (i.e., having striking faces formed from two spaced-apart, planar
<u>533</u>	
	sets of strings)
<u>534</u>	With adjustable string-tensioning means
<u>535</u>	Fiber reinforced plastic frame
<u>536</u>	Plural fiber compositions
537	Having dimensional characteristic or other parameter specified by a number,
<del></del>	numeric variable, or mathematical formula (e.g., location of center of gravity, elastic
	modulus of a string, weight of racket, etc.)
<u>538</u>	Of handle or grip
	Elongated string-hole liner (e.g., grommet, bushing, etc.)
<u>539</u>	
<u>540</u>	Having string mounting feature other than mere through-holes lying in string plane
<u>541</u>	Extending radially inward from inner frame edge
<u>542</u>	Having nonplanar string-hole pattern or arrangement in frame
<u>543                                    </u>	Prefabricated string assembly, means to prevent relative movement or wear at
	crossover points of strings, or having one or more strings with specified characteristic
	or arrangement
<u>544</u>	Nonmetallic frame having metallic reinforcement or frame composed of
	metal-plastic composite
<u>545</u>	Metallic frame
<del>546</del>	Throat wedge, bridge, or reinforcement
<del>540</del> 547	Having laminated frame
<u>548</u>	String guard, frame bumper or guard, or specified shaft to head connection
<u>549</u>	Handle or grip structure
<u>550</u>	Dispensing, cooled, or externally ventilated
<u>551</u>	Having hand or finger conforming contour, through-hole for finger, portion
	overlying back of hand, projecting hand stop or positioner spaced from butt, wrist
	strap, or nonstandard transverse cross-section
<u>552</u>	Grip or handle longitudinally or rotationally adjustable relative to head or shaft or
	changeable in length
<u>553</u>	Accessory for use with racket or paddle (e.g., used with or for tennis racket, etc.)
554	Press
555	Racket frame holder or support for use while stringing
556	With stringing or string-stretching device
<u>557</u>	Stringing or string-stretching device
<u>558</u>	. Mallet
	. Club
<u>559</u>	
<u>560</u>	Having elongated blade (e.g., hockey stick, etc.)
<u>561</u>	Fiber reinforced
<u>562</u>	Stick to blade joint construction
<u>563</u>	Blade construction or accessory
<u>564</u>	. Bat (e.g., baseball bat, etc.)
<u>565</u>	Having elongated blade (e.g., cricket bat, etc.)
<u>566</u>	Of metallic-shell structure
<u>567</u>	Of plastic composition
568	Grip
569	PROJECTILE, PER SE; PART THEREOF OR ACCESSORY THEREFOR
570	. With light-emitting, electrical, magnetic, or rotatable inertial means or having
<del></del>	boundary-detector activating means
<u>571</u>	. With sound-producing means
<u>571</u> 572	. Having suction cup
572 573	. Having suction cup  . Having bristled, hooked, or looped surface for adherence to complementarily
<u> </u>	
E74	surfaced means (e.g., Velcro@ material, etc.)
<u>574                                    </u>	. Having means for nonpenetrating adherence to complementarily surfaced means
	(e.g., tacky surface, etc.)

impart spin, etc.)

. Having attached or means for attaching thereto tether, elongated flaccid streamer, <u>575</u> or the like .. Attached tether, streamer, or the like has means adapted to be held by, carried by, <u>576</u> or attached to person . Scattershot, material dispensing upon impact, openable to expose interior chamber, 577 or having parts adapted to move away from, or be separated from, one another upon impact . Arrow, dart, or shuttlecock; part thereof 578 579 .. Shuttlecock (e.g., badminton shuttlecock, etc.) ... Having independent feathers or vanes 580 581\_ .. Having fluid-conducting means 582 .. Head structure ... Broadhead 583 <u>584</u> .... Having interchangeable blade ... And vane structure (i.e., flight guiding or stabilizing means) <u>585</u> .. Vane structure (i.e., flight guiding or stabilizing means) 586 587 . Curling stone <u>588</u> . Disk- or ring-shaped (e.g., ice hockey puck, etc.) .. Ring-shaped (e.g., deck-tennis quoit, etc.) 589 <u>590</u> . Boomerang 591 . Horseshoe 592 . Tipcat <u>593</u> . Having self-contained means for inflating, pressurizing, reinflating, or repressurizing projectile with fluid or comprising reinflating or repressurizing method <u>594</u> . Having loose internal element, containing or adapted to contain liquid, or comprising spherically configured ball having variable or eccentric center of gravity . Having means other than ellipsoidal spheroid shape (e.g., football shaped, etc.) to 595 produce erratic or unpredictable rebounding or rolling thereof 596 . Having handle or surface configuration for enhancing user's handgrip thereon .. Grip-enhancing means comprises closure or seam of casing or cover or comprises 597 simulation of such closure or seam (e.g., lacing of football casing, etc.) 598 . Comprising casing or cover having stitched seam or laced closure; blank for such casing or cover (e.g., casing of baseball, etc.) 599 .. For distensible bladder (e.g., casing of football, etc.) . Having solid core within outer cover; core or cover therefor (e.g., baseball, etc) 600 .. And having intermediate layer between core and cover or having core or cover 601 composed of plural lavers ... Having plural intermediate layers, at least one being of material diverse from 602 material of core, cover, or another intermediate layer; or having core or cover composed of three or more layers, at least two being of diverse materials <u>603</u> . Having fluid-retaining bladder removable from within enclosing cover or casing (e.g., football, etc.) . Having hollow core or bladder enclosed within cover (e.g., basketball, soccer-ball, 604 tennis ball, etc.) 605 .. And having intermediate layer composed of wrapping of strands or strips between cover and core or bladder 606 .. Cover is composed of feltlike, napped, or cloth material (e.g., tennis ball, etc.) 607 . Comprising cover for core; blank or closure therefor 608 .. Closure therefor . Having hollow, fluid-impervious shell, core, or bladder 609 .. With sealable opening, valve, or inflation tube for insertion of fluid (e.g., beach 610 ball, etc.) 611 . Comprising opening, valve, or inflation tube for insertion of fluid 612 . Having visible skeletal structure . Having fluid-dynamic means other than stitched seam or textured surface to alter, <u>613</u> stabilize, or retard passage of projectile through the fluid (e.g., spiral fluting to

- 614 . Having projections extending outwardly from external surface or consisting of a mass of radially oriented filaments
- 615 . Player held or worn means for enhancing movement of projected projectile (e.g., a handheld, ball-curving assist means, etc.)

## FOREIGN ART COLLECTIONS

## FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR100	BASKETBALL (273/1.5R)
FOR101	. Basketball training devices (273/1.5A)
FOR102	BASEBALL (273/25)
FOR103	. Practice devices (273/26R)
FOR104	Target or backstop (273/26A)
FOR105	Bats (273/26B)
FOR106	Player worn (273/26C)
FOR107	Ball pitching devices (273/26D)
FOR108	Tethered (273/26E)
FOR109	Tethered balls slidable along a line (273/26EA)
FOR110	. Field covers (273/27)
FOR111	. Ball curvers (273/28)
FOR112	TENNIS (273/29R)
FOR113	. Table (273/30)
FOR114	. Court marking strips (273/31)
FOR115	. Practice (273/29A)
FOR116	. Nets (273/29B)
FOR117	Net center stay (273/29BA)
FOR118	Net post (273/29BB)
FOR119	Net tightening (273/29BC)

.... Reel (273/29BD)

FOR120

FOR121	Lever	(273/29BE)

<u>FOR122</u> .... Screw (273/29BF)

FOR123 .... Rotating post (273/29BG)

**FOR124 FOOTBALL (273/55R)** 

FOR125 . Tackling dummies (273/55A)

FOR126 . Kicking tees and kicking trainers (273/55B)

<u>FOR127</u> . Flag belts (273/55C)

FOR128 . Goal post structure (273/55D)

FOR129 **CROQUET (273/56)** 

<u>FOR130</u> . Tables and boards (273/57)

FOR131 **HOPSCOTCH (273/57.1)** 

FOR132 HOCKEY

**FOR133 FENCING (273/57.3)** 

**FOR134 BALLS (273/58R)** 

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FOR136 .. Covers (273/60A)

<u>FOR137</u> .. No windings (273/60B)

<u>FOR138</u> . Tennis (273/61R)

<u>FOR139</u> .. Ping-pong balls (273/61A)

<u>FOR140</u> .. Fabrics, per se (273/61B)

FOR141 .. Rubber formulations (273/61C)

FOR142 .. Methods of pressurizing (273/61D)

FOR143 . Football and basketball (273/65R)

<u>FOR144</u> .. Closure (273/65A)

<u>FOR145</u> .. Bladders (273/65B)

<u>FOR146</u> .. Valves: composite (273/65C)

<u>FOR147</u> .. Valves: rubber (273/65D)

FOR148 .. Casings (273/64E)

<u>FOR149</u> ... Nonball art (273/65EA)

FOR150 ... Windings (273/65EB)

<u>FOR151</u> ... Weighted (273/65EC)

FOR152 ... Ball making methods (273/65ED)

FOR153 ... One-piece construction (273/65EE)

FOR154 ... Spiraling and electrical (273/65EF)

FOR155 ... Gripping structure (273/65EG)

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FOR163 . Loose internal elements (273/58F)

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FOR 168 BAT, MALLET, RACKET, OR BILLY (273/67R)

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